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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/408,264	09/29/1999	RAPHAEL PAUL CLAUDE CASSIERS	Q55802	3837

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EXAMINER	
NGUYEN, BRIAN D	
ART UNIT	PAPER NUMBER
2661	

DATE MAILED: 02/19/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/408,264	CASSIERS ET AL.	
	Examiner	Art Unit	
	Brian D Nguyen	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *the amendment filed 1/12/04*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 1-2 and 4 are objected to because of the following informalities:

Claim 1, "idle data packets" in lines 6-7 seems to refer back to "idle data packets" in line 4. If this is true, it is suggested to change "idle data packets" to ---the idle data packets---.

Claim 4, "said state transition arrangement" in lines 4-5 seems to refer back to "A state transmission arrangement" in line 1. If this is true, it is suggested to change "A state transmission arrangement" in line 1 to ---A state transition arrangement---. In line 7-8, "a low power state" seems to refer back to "a low power state in line 3. If this is true, it is suggested to change "a low power state" to ---the low power state---. In line 10, "a full power state" seems to refer back to "a full power state in line 4. If this is true, it is suggested to change "a full power state" to ---the full power state---.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 3, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morelli et al (6,236,674) or Russo (6,167,078) in view of Bremer (6,320,879) and Bowie (5,956,323).

Regarding claim 1, Morelli and Russo discloses a method to transition a communication system comprising a transmitter, a communication medium, and a receiver (see Figure 1 and col.

5, lines 17-29), from a low power state to a full power state, wherein when an active data packet is received at the transmitter, the system operates at a high bit rate at full power (see abstract; col. 1, lines 11-15; col. 4, lines 11-13; col. 6, lines 51-54; col. 18, line 1-5 of Morelli and abstract; col. 1, lines 41-58; col. 2, lines 24-26; col. 3, lines 17-19; col. 4, lines 29-31 of Russo). Morelli and Russo do not specifically disclose idle packets are transmitted at low bit rate at low power and interrupted packets are retransmitted. However, Bowie discloses a system in which the idle packet are transmitted at low bit rate at low power (see abstract; col. 2, lines 9-20; col. 3, lines 1-10; col. 4, lines 1-9; col. 5, lines 6-8) and Bremer disclose that interrupted data packet will need to be retransmitted (see col. 2, lines 11-14). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to transmit idle packets at low bit rate at low power as taught by Bowie and transmit a copy of the interrupted data packet as taught by Bremer in the system of Morelli or Russo in order to keep the communication between the transmitter and the receiver during a low power mode where there is no data to transmit and to ensure that interrupted data packet will be retransmitted to ensure the integrity of the communication.

Regarding claim 3, Morelli and Russo disclose state transition arrangement to be used in a transmitter being adapted to transmit data packets at low power when it is operating in the low power state and to transmit data packets at full power when it is operating in the full power state (see abstract and col. 1, lines 11-15), characterized in that the state transition arrangement comprises interruption means for interrupting transmission of a currently transferred data packet (see interruption at time t_2 of Figure 7 and col. 4, lines 11-13 of Morelli and abstract; col. 1, lines 41-58; col. 2, lines 24-26; col 3, lines 17-19; col. 4, lines 29-31 of Russo). Morelli and Russo do

not explicitly disclose an idle data packet is transmitted in the low power state and re-transmission means for transmitting a copy of the currently transferred data packet at full power. However, Bowie discloses a system in which the idle packet are transmitted at low bit rate at low power (see abstract; col. 2, lines 9-20; col. 3, lines 1-10; col. 4, lines 1-9; col. 5, lines 6-8) and Bremer disclose that interrupted data packet will need to be retransmitted (see col. 2, lines 11-14). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to transmit idle packets at low bit rate at low power as taught by Bowie and transmit a copy of the interrupted data packet as taught by Bremer in the system of Morelli or Russo in order to keep the communication between the transmitter and the receiver during a low power mode where there is no data to transmit and to ensure that interrupted data packet will be retransmitted to ensure the integrity of the communication.

Regarding claim 4, Morelli and Russo disclose state transition arrangement to be used to transfer from a low power state to a full power state in a receiver being adapted to receive data packets at low power when it is operating in the low power state and to receive data packets at full power when it is operating in the full power state (see abstract; col. 1, lines 11-15; and col. 4, lines 24-34 of Morelli and abstract; col. 1, lines 41-58; col. 2, lines 24-26; col 3, lines 17-19; col. 4, lines 29-31 of Russo). Morelli and Russo do not explicitly disclose an idle packet is transmitted at low power state and detection means for detecting an interrupted low power data packet and deletion means coupled to the detection means for deleting the interrupted low power data packet, and reception means for receiving a copy of the low power data packet at full power. However, Bowie discloses a system in which the idle packet are transmitted at low bit rate at low power (see abstract; col. 2, lines 9-20; col. 3, lines 1-10; col. 4, lines 1-9; col. 5, lines 6-8) and a

receiver with means for detecting an interrupted data packet if such interruption occurred, deleting the interrupted packet, and receiving a copy of the interrupted packet is well known in the art. Bremer from the same or similar field discloses a receiver in which an interrupted data packet will be detected and deleted (discard) and a copy of the interrupted data packet will be received (see col. 2, lines 14-24 and col. 5, lines 1-12). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to detect and delete the interrupted data packet and to receive a copy of the interrupted data packet as taught by Bremer in the system of Morelli or Russo so as to ensure the reception of reliable data when switching from a low power to a full power state.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morelli et al (6,236,674) or Russo (6,167,078) in view of Bremer (6,320,879) and Bowie (5,956,323) as applied to claim 1 above, and further in view of Gibson et al (6,049,885).

Regarding claim 2, Morilli or Russo in view of Bremer and Bowie disclose all the claimed subject matter as described in previous paragraph, except for transmitting a state transition indication to the receiver before the copy of the currently transferred data packet is transmitted at full power. However, Gibson discloses a transmitter for transmitting a state transition indication (a remote wake-up packet) to a receiver (remote device) to take the receiver out of its low power state (see abstract and col. 2, lines 3-6). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to transmit a state transition indication to the receiver as taught by Gibson in the system of Morelli or Russo in view of Bremer and Bowie so that the receiver will know what mode the transmitter is operating so as to receive and process the incoming data packet correctly.

Response to Arguments

5. Applicant's arguments with respect to claims 1-4 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian D Nguyen whose telephone number is (703) 305-5133. The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian Nguyen
2/18/04